

Claims

[c0001] 1. A heat sink assembly within a potted housing, comprising:

a bracket mounted to an interior surface of said housing; a heat-containing element; and, a self-tapping screw threaded into said bracket, engaging said heat-containing element, and urging said element against said bracket.

[c0002] 2. The heat sink assembly as recited in Claim 1 wherein said heat-containing element further comprises a heat sink; and,

wherein said self-tapping screw is operatively arranged to urge said heat sink against said bracket.

[c0003] 3. The heat sink assembly as recited in Claim 2 wherein said heat-containing element further comprises a printed circuit board (PCB) comprising said heat sink.

[c0004] 4. The heat sink assembly as recited in Claim 3 wherein said PCB further comprises an integrated circuit (IC) comprising said heat sink.

[c0005] 5. The heat sink assembly as recited in Claim 4 wherein said housing further comprises a housing for a fuel

pump and said PCB further comprises an oscillator circuit.

[c0006] 6. The heat sink assembly as recited in Claim 1 wherein said bracket is brass.

[c0007] 7. The heat sink assembly as recited in Claim 1 wherein said bracket is connected to said interior surface with a fastener selected from the group including rivets and threaded fasteners.

[c0008] 8. A heat sink assembly in a potted housing for a fuel pump, comprising:

a brass bracket connected to an interior wall of said housing;
a printed circuit board (PCB) with a heat sink; and,
a self-tapping screw threaded into said bracket, engaging said PCB, and urging said heat sink against said bracket.

[c0009] 9. The heat sink assembly as recited in Claim 8 wherein said PCB further comprises an integrated circuit (IC) comprising said heat sink.

[c0010] 10. The heat sink assembly as recited in Claim 9 wherein said PCB further comprises an oscillator circuit comprising said heat sink.

[c0011] 11. The heat sink assembly as recited in Claim 8 wherein said bracket is connected to said interior surface with a fastener selected from the group including rivets and threaded fasteners.

[c0012] 12. A heat sink assembly in a potted housing for an integral fuel pump, comprising:
a brass bracket connected to an interior wall of said housing with a rivet;
a printed circuit board (PCB) with an oscillator circuit and a heat sink; and,
a self-tapping screw threaded into said bracket, engaging said PCB, and urging said heat sink against said brass bracket.

[c0013] 13. A method for transferring heat within a potted housing, comprising the steps of:
connecting a mounting bracket to an interior wall of said housing;
threading a self-tapping screw into said mounting bracket; and,
with said screw, engaging a heat-containing element and pressing said heat-containing element against said mounting bracket.

[c0014] 14. The method recited in Claim 13 wherein said heat-containing element further comprises a circuit element

with a heat sink; and,
wherein said pressing further comprises pressing said
heat sink against said mounting bracket.

[c0015] 15. The method recited in Claim 14 wherein said circuit element further comprises a printed circuit board (PCB) comprising said heat sink.

[c0016] 16. The method recited in Claim 15 wherein said PCB further comprises an integrated circuit (IC) comprising said heat sink.

[c0017] 17. The method recited in Claim 16 wherein said housing further comprises a housing for a fuel pump and said PCB further comprises an oscillator circuit.

[c0018] 18. The method recited in Claim 13 further comprising:
forming said mounting bracket from brass.

[c0019] 19. The method recited in Claim 13 wherein said connection further comprising connecting said mounting bracket to said interior surface using a fastener selected from the group including rivets and threaded fasteners.

[c0020] 20. A method for transferring heat within a potted housing for an integral fuel pump, comprising the steps of:
threadingly connecting a brass bracket to an interior wall of said housing;

threading a self-tapping screw into said mounting bracket;
contacting, with said self-tapping screw, an oscillator circuit with a heat sink; and,
urging said heat sink against said mounting bracket with said self-tapping screw.